



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,063	09/30/2003	Dany Sylvain	15967ROUS01U	5841
22033	7590	05/10/2007		
NORTEL NETWORKS P O BOX 13828 RESEARCH TRIANGLE PARK, NC 27709-3828			EXAMINER KUNAMNENI, HARI P	
			ART UNIT	PAPER NUMBER
			2109	
			MAIL DATE	DELIVERY MODE
			05/10/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office-Action Summary

**Application No.**

10/675,063

**Applicant(s)**

SYLVAIN ET AL.

**Examiner**

Hari Kunamneni

**Art Unit**

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED OFFICE ACTION**

### ***Specification Objections***

1. Specification of page 1, first para, line 2, is objected to because, it lacks the serial number of applications, that were incorporated by reference.

### ***Claim Objections***

2. Claims 1-12, 15 and 16 are objected to because of the following informalities:

Claim 1, 13, 14, and 18 use the terms VPN and NAT; VPN should be replaced as Virtual Private Network (VPN) and NAT should be replaced as Network Address Translation.

Claim 1, line 2, insert indefinite article, 'a' in front of phrase, "different addressing schemes". All dependant claims on claim 1 (Clams 2-12, 15 and 16) are also objected.

Claim 5 is further objected because, on line 1, insert "one or more" in front of, "physical or logical interface ports"; in line 2, insert "one of" in front of "physical or logical interface ports".

Claim 11 is further objected because, line 1, states, "The VPN gateway of claim 1, the communication session", there is no communication session in claim 1, however, there is a communication session in claim 10. Therefore, it is assumed that claim 11 is dependant upon claim 10.

Claim 12 is further objected because, lines 1-2 states, "... claim 5 arranged ... communication session.", however, there is no communication session in claim 5, but, there is a communication session in claim 10. Therefore, it is assumed claim 12 is dependant upon claim 10.

Claim 16 further objected because, lines 1 needs a change "for" in front of " a network" to "in";

Appropriate corrections are required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2109

4. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, because it violates single sentence rule by not ending the claim with a period.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13, 14 and 17 are rejected under 35 U.S.C. 101 as setout below.

Claims 13 and 14 are rejected under 35 U.S.C. 101 because they are statutory process (i.e. method) claims implementing judicial exception of abstract idea (like passing information, converting, receiving addresses, translating the addresses) without tangible result. Claim 17 is also rejected, because it is dependant upon rejected claim 13.

Claim 17, "Software for carrying out the method of claim 13", is rejected under 35 U.S.C. 101 because claim 17 is implementing a method in software which does not belong to any statutory class of machine, process, composition of matter or article of manufacture.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by SonicWALL Administration guide (2002).

For claims 1, 13, 17 and 18:

A VPN gateway, method, software, and signals (See Fig. on page 117, the item with label SOHO3 in One-Arm WAN port connected) for interfacing two or more VPNs (see page 96, section, "Currently Active VPN Tunnels", which implies there are more than one VPN; further in the section description, "The table lists the name of the VPN Policy, the local LAN IP addresses, and the remote destination network IP addresses as well as Peer Gateway IP address.", line 1-3.) to one or more external networks (see page 96, section, "Currently Active VPN Tunnels", lines 1-3, "the remote destination network IP addresses as well as Peer Gateway IP address. ", therefore there is at least one external network), the external network or networks having different addressing schemes to those of the VPNs (see page 117, Figure, different addressing schemes, VPN's having class C addressing scheme (bottom cylinder, "Ethernet 192.168.1.0/24") and external network is having class A addressing scheme

(10.0.79.103, etc. ), the VPN gateway having a NAT (see page 65, Section Network>One-to-One NAT) shared by the VPNs for converting VPN addresses of entities within the VPNs to addresses (see page 117, Section, "VPN Single-Armed Mode (stand-alone VPN gateway)", second para, first line, "An Example of deployment is to place the SonicWALL between the existing firewall and the router connected to the Internet.", in conjunction with the Figure, bottom cylinder, having network netid: 192.168.1.0; which implies 192.168.1.0/24 addresses are VPN local address) of the external network (see page 66, section, "One-to-One NAT Configuration Example", last para, Requests for <http://208.1.2.4> are answered by the server at 192.168.1.10, Request for <http://208.1.2.5> are answered by the server at 192.168.1.11, and requests for <http://208.1.2.6> are answered by 192.168.1.12.", here the VPN entity addresses 192.168.1.10-12 are mapped to/or of the external network 208.1.2.4-6.).

For claim 2:

The VPN gateway of claim 1 (for claim 1 discussion see supra), the NAT comprising a source (see page 67, last Para, Assume 208.1.2.4-6, in public Range is source NAT) and destination NAT (see page 67, last Para, assume 192.168.1.10-12 in the private range is destination NAT), arranged such that entities in the external networks (entities in the external network 208.1.2.4-6) appear to one of the VPNs to have an address within an address range of the

respective VPN (VPN address (192.168.1.0/24) range, 192.168.1.10-12).

For claim 3:

The VPN gateway of claim 2 (for claim 2 discussion see supra), the entities in the external networks comprising at least one of: a call server, a SIP proxy, a web server (see page 120, Figure, Remote LAN 2, containing 2 VPN users external to VPN LAN, on Remote DMZ, WEB Server or on Corporate DMZ, Web Server), a storage server see page 120, Figure DHCP over a VPN Tunnel, external network corporate DMZ, FTP server; which is a file server, nothing but storage server), a video server, a mail server (see page 120, Figure DHCP over a VPN Tunnel, external network corporate DMZ, Mail server), an H.323 gateway, a telephony client, or a telephony media gateway.

For claim 4:

The VPN gateway of claim 1 (see supra for claim 1 discussion), the external network address used for each VPN entity being unique (page 117, Figure, see the unique addresses of SOHO3 in One-Arm WAN port connected, address of, 10.0.79.102 which is external network address to VPN addresses) in the corresponding external network.

For claim 5:



The VPN gateway of claim 1 (see supra for claim 1 discussion) having physical or logical interface ports (see page 117, section "VPN Single-Armed Mode", first para, "VPN Single-Armed Mode allows you to deploy a SonicWALL with single port (WAN) utilized as a VPN tunnel termination point", i.e. physical WAN port), and being arranged to determine an identity of each of the VPNs based on which physical or logical interface port on the VPN gateway is used to couple the respective VPN (each sonicWALL WAN IP address is used to couple the VPN's, see description in section, "VPN Single-Armed Mode (stand-alone VPN gateway)", first para, last line, "Clear text traffic is routed to the single interface, and the data is encapsulated to the appropriate IPSec gateway.", to be able to send/receive (for establishment of VPN tunnel) the encapsulated data, source/destination IP address has to be used.).

For claim 6:

The VPN gateway of claim 1 (see supra for claim 1 discussion), the VPN's each comprising a part of an Internet Protocol (IP) network (see page 117, Figure, the WAN port used address (10.0.79.102, under the label "SHOHO 3 in One-Arm WAN port connected") clearly indicates that the VPN gateway is used as part of IP network).

For claim 7:

Art Unit: 2109

The VPN gateway of claim 6 (see supra for claim 6 discussion) where the multiple VPNs use overlapping private IP addressing schemes (See Page 117, Figure, VPN lan netid of 192.168.1.0, for bottom cylinder labeled as 192.168.1.0/24 (whose netid is 192.168.1.0) and netid of 192.168.2.0, see Figure top cylinder network label, 192.168.2.0/24 (whose network id will be: 192.168.2.0) are overlapping considering overall netid of 192.168.252.0, which is the aggregation of 192.168.1.0 and 192.168.2.0).

For claim 8:

The VPN gateway of claim 6 (See supra for claim 6 discussion), being arranged to provide protocol conversion (see page 110, last para, section, "Require authentication of remote users", the use of XAUTH as authentication requires protocol conversion from user XAUTH to IP and back to XAUTH).

For claim 9:

The VPN gateway of claim 1 (see supra for claim 1 discussion), the VPNs being arranged to use at least one of ATM, Frame Relay, MPLS or IP (see Page 117, Figure, from the gateway WAN IP address used is 10.0.79.102 and VPN network address used 192.168.1.0/24, shown under the label, "SOHO3 in One-Arm WAN port connected", which is a IP).

For claim 10:

The VPN gateway of claim 1 (see supra for claim 1 discussion) arranged to couple communication sessions having one end in one of the VPNs (see page 124, Figure L2TP Server Settings, one end is VPN gate way) and another end in the external network, the sessions being controlled by a server (see page 124, Figure L2TP Server Settings, WINS server 10.0.0.32, which is an external use local LT2P IP Pool: Start IP 192.168.168.100 – 192.168.168.125).

For claim 11:

The VPN gateway of claim 10 (see supra for claim 10 discussion), the communication sessions being one of data sessions (see page 124, Figure L2TP Server Settings and L2TP is a data session), telephony calls, or video calls

For claims 12:

The VPN gateway of claim 10 (see supra for claim 10 discussion), arranged to communicate to the external network entities the VPN identity associated (see page 125, section "Currently Active L2TP Sessions, Interface subsection, "the enter of interface used to access the L2TP Server, whether it's a VPN client or another SonicWALL [This implies SonicWALL port IP address, which is unique is used for the communication session] appliance") with a given communication session.

For claim 14:

A method of using a NAT (see page 65, Section Network>One-to-One NAT, in conjunction with page 67, first TIP!, "You can configure the IP addresses individually,...", therefore, the NAT VPN side addresses can be configured to share the addresses in different VPN's) shared by two or more VPNs (see page 96, section, "Currently Active VPN Tunnels", which implies there are more than one VPN; further in the section description, "The table lists the name of the VPN Policy, the local LAN IP addresses, and the remote destination network IP addresses as well as Peer Gateway IP address.", line 1-3.) to communicate between one of the VPNs and an entity of an external network or networks (see page 96, section, "Currently Active VPN Tunnels", lines 1-3, "the remote destination network IP addresses as well as Peer Gateway IP address. ", therefore there is at least one external network) having different addressing schemes to those of the respective VPN (see page 117, Figure, different addressing schemes, VPN's having class C addressing scheme (192.168.1.0) and external network is having class A addressing scheme (10.0.79.103, etc.), comprising the steps of receiving addresses and translating the addresses such that entities in the external networks (see page 67, last Para, external network entity, 208.1.2.2-4) appear to the respective VPN to have an address within an address range of the respective VPN (see page 67, last Para, it appears to be VPN entities 192.168.1.10-12 are translated to: 208.1.2.2 to 192.168.1.10, 208.1.2.3 to 192.168.1.11 and 208.1.2.3 to 192.168.1.12).

Art Unit: 2109

For claim 15:

A method of offering a virtual packet network service (The gateway is providing http service packets to be able to show various settings, for example as shown in page 29, figure, address bar having an address of: <http://192.168.168.17/main.html>) using the gateway of claim 1 (see supra for claim 1 discussion).

For claim 16:

A node for [in] a network, the node having a VPN gateway (see page 117, under label SOHO3 in One-Arm Wan port connected, is a node in the network shown in the figure) as set out in claim 1 (see supra for claim 1 discussion).

For claim 19:

The sequence of signals of claim 18, further comprising a signal from the VPN gateway to the entity in the external network containing an identity of the respective VPN (see page 117, Figure, for there to be an VPN tunnel, gateway IP encapsulated in an IP packet which is a signal must be sent from gateway to external network router(s) to 10.0.79.101 Head end gate way, in conjunction with section, "VPN Single-Armed Mode (stand-alone VPN gateway)", first Para, VPN Sigle-Armed Mode allows you to deploy a SonicWALL with single port (WAN)

Art Unit: 2109

utilized as a VPN tunnel termination point. Clear text traffic is routed to the single interface and the data is encapsulated to the appropriate IPsec gateway.”).

## CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hari Kunamneni whose telephone number is (571)274-1592. The examiner can normally be reached on Monday thru Friday 7:30-5:00 PM alt. fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FRANTZ JULES can be reached on (571 )272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

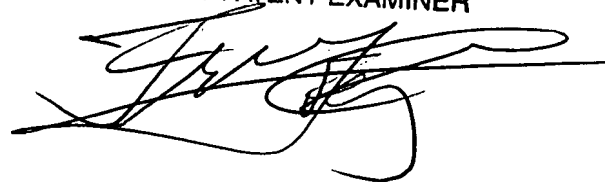
Application/Control Number: 10/675,063

Page 14

Art Unit: 2109

hpk  
5/3/2007

FRANTZ JULES  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Jules Frantz', is written over the printed name and title.